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531. m. 3  
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ACCOUNT of the PASSAGE

of

*Ship ATLAS, Capt. ALLEN COOPER,*

to the

EASTWARD of BANKA,

1785.

K

Published at the Charge of the East India Company,

from *Capt. Cooper's MS.*

by

Dalrymple.

L O N D O N,

Printed by G E O R G E B I G G, 1789.



at 8 AM 8 1/2 A.M. At 8 AM he was off  
the Coast of Java from Greenwich; The Log  
showed him to be at Lat. 5° 2' S. Long.  
105° 6' E. from Greenwich. The Variation  
was N. by E. 2° 10' 2d March 1789.

**CAPT.** *Cooper* was possessed of a Pocket Chronometer  
by *Arnold*, which in his opinion was without error;  
for, at his arrival on the Coast of Java from *England*, by his  
estimation from *Batavia* according to M. D'Après' Chart,  
he was, only 13' different from what his Chronometer  
indicated; but, as Capt. *Huddart* found on Capt. *Cooper's*  
arrival at *Canton*, that his Chronometer had a rate of  
gaining 5'. per day, and as Capt. *Cooper's* inferences  
in the vicinity of *Batavia* do not seem to agree together,  
nor the distances assigned to correspond with the true  
distances from *Batavia*. It appears necessary to be very  
explicit in this part of his Voyage.

On the 25th July, At 5 PM, Capt. *Cooper* was by  
Chronometer in Long. 105° 6' E from Greenwich; The  
Variation at Azimuth 0° 17' W.

From this time to 8 AM he made his Course by  
the Log NNE good; but the Chronometer shewed that  
a Current had, in these 15 hours, set them 21'.

A to

to the *Westward*. At 8 A M, being then in Long.  $105^{\circ} 5'$  E, they made *Clapp's Island*, near the *South Coast* of JAVA, bearing from N to NNW 6 leagues distant. From these *Bearings*, on M. D'Aprés' *Chart*, Capt. *Cooper* infers he was  $1^{\circ} 33'.W$  of *Batavia*, which being in  $106^{\circ} 51'.W$

Chronometer  $105^{\circ} 5.$  by Chronometer he was  $1^{\circ} 46.$

Error from *England*  $52'$  of time, or  $0. 13.$

But by my *Chart*, taken from M. D'Aprés last Publications, C. *Cooper* was then  $1^{\circ} 41'.W$  from *Batavia*, or only  $5.'$  to the East of where his Chronometer placed him: so that, so far as this Observation goes, his Chronometer seemed to have gone exactly to *Mean-Time*, during the course of his Voyage from *England*, which he left the 7th April, and although the day when he received the Chronometer is not mentioned, as the time elapsed was above 100 days, the total difference, portioned to the time elapsed, would not give a daily rate that could be ascertained by any Observations at Sea, and therefore his landfall cannot be of any use in ascertaining the then rate of his Chronometer.

The

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The following is the Abstract of Capt. Cooper's Chronometer Observations.

1785	Lon. $\frac{\text{M}}{\text{H}}$ Chron.	Longitude from Batavia.	Bearings by which inferred.	Longitude of Places so inferred,
	$\frac{\text{M}}{\text{H}}$ Chron.	Differ. $\frac{\text{M}}{\text{H}}$ Chart.	by Chronometer.	
25th July .	105° 5' E	1° 46'	0° 5' W	N 105° 5' E NNW 104. 58
26th . .	104. 54	1. 51	0. 2 W	Clapp's Island 4 leagues ESE 105. 5
				Java Head 3 leagues NW 104. 48
31st . .	105. 40	1. 11	0. 16 W	Ext. Java { SWbS SbE½E off shoar 4 lea. Great Cap 4 leagues SWbW 105. 31
1st August .	105. 45	1. 6	0. 19 W	West Island 2 leagues ENE½N 105. 50. 20°
				High Land Bantam 6½ lea. SSW
2d $\frac{\text{M}}{\text{H}}$	105. 56	0. 55	0. 6 W	West Island . . . S 40° E
				S° Brother . . . NW
				N° Brother . . . N 42° W
				North Watcher . . . E 24. N
3d . .	105. 49	1. 2	0. 21 W	North Watcher . . . 4' East 105. 53.

So that there is no uniformity in the going of the Chronometer during these 9 days; or the Positions are not well assigned, and consequently no precise inference can be made, by a comparison with *Batavia*: Taking the first and last days, the Chronometer appears to have lost 16' or 72<sup>s</sup> in 9 days, i. e. 8<sup>s</sup>  $\frac{\text{M}}{\text{H}}$  day: comparing the first day with the last but one, the loss was only 4<sup>s</sup>

in

in 8 days, or half a second  $\frac{1}{2}$  day. But Capt Huddart found that Capt. Cooper's Chronometer had a rate of 5'  $\frac{1}{2}$  day gaining on his arrival at Canton: The Correction, of Capt. Cooper's Longitudes, by this Rate will be as follows.

	Chronom. W. of Chart
25th July, 105° 5'. E Long. by Chronometer.	By Chart 105° 10.' E 0° 5'. 3"
26th . . 104. 54. 1 day at 5' gain = 1 $\frac{1}{4}$ . or 104° 52.45. 104.56. . 0. 3. 45	
31st . . 105. 40. 5 . . . . 6 $\frac{1}{4}$ . 105.33.45. 105.56. . 0. 22. 15	
1st Aug. 105. 45. 1 . . . . 1 $\frac{1}{4}$ . 105.43.45. 106. 4. . 0. 20. 15	
2d . . 105. 56. 1 . . . . 1 $\frac{1}{4}$ . 105.54.45. 106. 2. . 0. 18. 15	
3d . . 105. 49. 1 . . . . 1 $\frac{1}{4}$ . 105.47.45. 106.10. . 0. 12. 15	

so that Capt. Cooper's Observations, by Chronometer, do not give, with competent precision, the Longitudes in this quarter: if no mistake has been made in working the Observations, or in allowing for the Equation, which Error, if any, cannot be traced, as Capt. Cooper, unfortunately, has not preserved the work.

I cannot conclude without making my acknowledgements to Capt. Cooper, for his obliging attention to me in communicating his Observations.

Dalrymple.

Ship

1785.  
Sunday, July 24,

Ship ATLAS, Capt. Allen Cooper, from LONDON  
towards CHINA.

Course. Dist. D.L. Dep. Latitude. D.Lon. Lon. A. Lon.  $\frac{d}{h}$  Chron.  
A O at Noon.  
N 6° E 147' 146' 15' 8° 28'S 8° 40'S 15'E 107° 13'E 104° 51'

Monday, July 25.

H. Weather. Winds. Course. K. F. Soundings.

1, 3 Cloudy EbS . NNE  $\frac{1}{2}$  E 18.6  
4 . . . . East . NNE . 6.6  
5 . . . . . NNE  $\frac{1}{2}$  E 6.6 { Var.  $\frac{d}{h}$  Az. . . 0° 17' W  
Long.  $\frac{d}{h}$  Chron. 105. 6. E  
6 . . . . . . . . 6.6  
7, 8 . . . . . NEbN 10...  
9, 10 L° to NW ESE. NE . 9.6 Magnified shot record  
11, 12 . . . . . NE  $\frac{1}{2}$  N 10.4  
1 . . . . . NNE  $\frac{1}{2}$  E 4.4  
2 . . . . . . . . 2.00  
Hard Rain. Hove to.  
3 . . . . Up NE Off NbW . . . .  
4 . . . . . } Up NE . . . No Ground 90 fms  
5 . . . . . } Off NNE . . .  
6 Made Sail . . . . } Off NNE . . .  
7 . . . . . NNE . 4.4  
8 . . . . . N  $\frac{1}{2}$  W . 4.00 { Saw Land from Mast-head  
Long.  $\frac{d}{h}$  Chron. 105° 5' E  
9, 10 . . . . . . . . 4.6  
11, 12 . . . . . NNE . 4.00  

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92.7

Light Winds and cloudy Weather.

At 8 AM, first signs of land visible from 1  
Saw the Land, being Claps Island, bearing from N° to NNW  
about 6 leagues distant  
B has 3000 fms. The

## ATLAS.

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1785.  
July 25.

At Noon,

Body of Claps Island	.	.	.	NW 5 leagues
Trovers Island	.	.	.	NE $\frac{1}{2}$ N
High Land on Java	.	.	.	NbW $\frac{1}{2}$ W 8 leagues
Long. $\frac{3}{4}$ Chron. at 8 AM	.	.	105° 5.'	
Last Obs. D *	.	.	105. 40.	

Diff. 35 Miles

The Land we first saw at 8 AM, was

Claps Island bearing NNW 6 leagues

From these Bearings I correct my Watch as follows:

Long.  $\frac{3}{4}$  Chronometer 105° 5.'

Long. of Batavia 106. 51.

Dist. from Batavia by Chronometer 1. 46.

True dist. as measured from M. D'Apris Chart 1. 33.

To the Westward of true Long. of the Ship's situation when she made Land 0. 13.

Long. at 8 AM 105. 5.

13.

True Long. of the Ship, Claps Island bearing NNW to N 105. 18.

Course.	Dist.	D.Lat.	Dep.	Latitude.	D.Lon.	Lon. A.
A.	O.					
N 16° E.	90.'	86°	26'	7° 14.' S	26.'	107° 39.'

I must observe that there is more danger of a Ship's falling to leeward of Java Head, than is generally thought. I crossed the Tropick, by very good Observations, in 103° E, and after that time, could scarcely ever lay up better than NbE, and should certainly have fallen to Leeward,

1785.  
July 25. *Leeward*, had not the Trade favoured me a little, in the Lat. of 8° and 9° and the Ship holding a very good wind. I think no Ship should depend on the SE Trade, as it is called here, to make any *Easting*, as the wind hangs chiefly at NbE and NNE, <sup>\*</sup> blowing very fresh and raising a large Sea,

The *South*, *East* and *West* sides of the Island of *Trovres* (which were the only parts of it I saw) have a dangerous *Reef of Rocks* extending from off them, at least a mile, on which the Sea *breaks* very high; and to be *heard*, two leagues at Sea. The *Island* is entirely covered with wood, and is about  $2\frac{1}{2}$  leagues in extent from East to West.

*Claps Island*, I should also think, as well as the other, dangerous to approach; as it appears to have a very *rocky Coast*. I found the *Tide*, or Current, set in very strong, towards the shoars of *both* these *Islands*.

Wednesday,

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\* Obviously a mistake of the Pen, it means The Wind hangs so far Easterly that You cannot make a more *Easterly Course* than NbE and NNE. *D*

1785.	H. Weather. Winds. Course. K. F. Soundings.	Wind. 1000 ft. 1000 ft. 1000 ft.
Tuesday, July 26.	Fair . . . SWbW NW $\frac{1}{2}$ W 2.6	Wind. 1000 ft. 1000 ft. 1000 ft.
2 . . . . .	TK <sup>4</sup> to the Southward	Wind. 1000 ft. 1000 ft. 1000 ft.
3 . . . . .	SW . SSE 2.0	Wind. 1000 ft. 1000 ft. 1000 ft.
4, 5 . . . . .	SWbS. SEbE. 2.0	Wind. 1000 ft. 1000 ft. 1000 ft.
6 . . . . .	TK <sup>4</sup> SW { 1.0 1.0	Wind. 1000 ft. 1000 ft. 1000 ft.
7 Th. & Light <sup>4</sup> . SSE . . . . .	SW $\frac{1}{2}$ W 12.4	Wind. 1000 ft. 1000 ft. 1000 ft.
9, 10 . . . . .	SW . 12.0	Wind. 1000 ft. 1000 ft. 1000 ft.
11 Taken aback N° . . . West . . . . .	2.4	Wind. 1000 ft. 1000 ft. 1000 ft.
12 Hard Rain . . . . .	2.0	Wind. 1000 ft. 1000 ft. 1000 ft.
13 1, 4 . . . . . Variable	NWbN. 14.0	Wind. 1000 ft. 1000 ft. 1000 ft.
5, 6 . . . . . ESE . . . . .	WNW 9.4	Wind. 1000 ft. 1000 ft. 1000 ft.
7, 8 . . . . .	NWbW 9.0 Long. 70° Chron. 104° 54' E	Wind. 1000 ft. 1000 ft. 1000 ft.
9 . . . . .	4.4	Wind. 1000 ft. 1000 ft. 1000 ft.
10 . . . . .	WNW 3.4	Wind. 1000 ft. 1000 ft. 1000 ft.
11 . . . . .	4.0	Wind. 1000 ft. 1000 ft. 1000 ft.
12 . . . . .	4.0	Wind. 1000 ft. 1000 ft. 1000 ft.

Dist. 89 Miles

## At 2 PM,

Body of Claps Island . . . . .	WbN $\frac{1}{2}$ N
East Point of Trovers Island . . . . .	NEbE
High Land of Java . . . . .	NWbN

## At 4 PM,

Body of Claps Island . . . . .	WNW
High Land of Java . . . . .	NW
Extream Points of Trovers Island . . . . .	NNW to NbE $\frac{1}{2}$ E 3 lea'

At  $\frac{1}{2}$  past 5 PM,

Extream Points of Trovers . . . . .	N 26°W to N 55° W
Body of Trovers . . . . .	NW 7'
Claps Island . . . . .	W $\frac{1}{2}$ S 5 leagues

At

1785. July 26.	At Sunrise, Java Head . . . . .	NW $\frac{1}{2}$ W 6 leagues
 At 8 AM, Long. $\frac{3}{4}^{\text{h}}$ Chron. $104^{\circ} 54' E.$		
	Java Head . . . . .	NW 3 leagues
	Claps Island . . . . .	ESE 4 leagues
 At 10, Java Head . . . . .		
		NNW 4'
 At $\frac{1}{2}$ past 10, Princes Island . . . . .		
		NbW 7 leagues
 At Noon, Lat. O. $6^{\circ} 49' S.$		
	Java Head . . . . .	SSE 9'
	Friar . . . . .	N $\frac{1}{4}$ W 4'
	Peak on Prince's Island . . . . .	NbE

I shall correct my Chronometer from the bearings of the *Extreme Point* of Java to the Southward, and Claps Island, allowing myself at that time to be 12 miles to the Eastward of Java Head.

Long. $\frac{3}{4}^{\text{h}}$ Chronometer at 8 AM . . . . .	$104^{\circ} 54'$
Long. Batavia . . . . .	$106. 51.$
Dist. from Batavia $\frac{3}{4}^{\text{h}}$ Chronometer . . . . .	$1. 57.$
True Dist. $\frac{3}{4}^{\text{h}}$ D'Apres Chart. . . . .	$1. 45.$
Difference to be added to Lon. $\frac{3}{4}^{\text{h}}$ Chronometer . . . . .	12.

This Error of the Chronometer gives the Longitude to the Westward of the Ships true situation, therefore 12 miles must be added to correct the Chronometer.

C Wednesday,

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1785.  
Wednesday, July 27.

H.	Weather.	Winds.	Course.	K. F.	Soundings.	At
1, 2	Fair.	SE.	NEbE	11..		Square top
3, 4				12..		Same
5, 6				13..		Same
7			ENE	14..	5 fms soft mud	MA 8 1A
8		W		15..		Same
		SW	NEbE	16..		Same
9				17..		Same
10			NNE	18..	22, 21, 18, 18	1A
11				19..	18, 18, 17, 16	1A
12				20..	16 to 22	Same
1			Up E off EbN	21..	16, 22	
2				22..	18, 17	10 fms + 1A
3			EIN off NEbE	23..	17, 20	Same
4				24..	20, 20	Same
5			East off NE	25..	20, 20	
6	Made sail			26..	20, 20	
7			NE	27..	20 $\frac{1}{2}$ , 19 $\frac{1}{2}$	At Moonrise 1A
8				28..	22, 19	Same
9		W		29..		Same
10, 12		SW	NEbN	30..	Same	Same
					70..	

At 2 saw a Ship in New Bay, shewed Portuguese Colours.

At 4 PM,

2 <sup>d</sup> Point	MA 3	SSE 3'
Peak on Princes Island		NWbW 3 leagues

At 6 set,

3 <sup>d</sup> Point	EbN 5'	
N <sup>o</sup> End of Princes Island		WSW

At 8 PM,

3 <sup>rd</sup> Point	SbE 3'	
		Same

At 6 rise,

Extremes of Java	SSE to NE	off shore 3'
Peak on Croatoa		WbN 1/2 N

At

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July 27.

At 8 AM,

Tbwart-the-Way Isle . . . . .

NbE $\frac{1}{2}$ E

The Coast of Java after passing the 3<sup>d</sup> Point is very high, inland.

There is very good Anchorage along this part of the Coast, in 20 fms stiff mud.

A strong Current, apparently running to the SW, which I observed by its passing the Fishing Pots so rapidly.

Thursday, 28.

H. Weather. Winds. Course. K. F. Soundings.

1, 2 Cloudy Variable NEbN 3 . . . 20 fms.  
3, 4 . . . . . 20 . . . . .  
7 Came to  $\leftrightarrow$  with the B. B. in 8 fms black sand

MA 11 :A

At 4 PM,

Anger Point . . . . . NE 5°  
Extream of Java to the Southward . . . SbW off shoar  
Little Cap . . . . . NEbN  
Great Cap . . . . . NbE $\frac{1}{2}$ E

At 7 PM,

Lacona Point . . . . . NEbE 2°

There are Breakers a mile off the Fourth Point of Java, and from that to Anjere, the Soundings are irregular and deep, but if you luff in shoar you find regular Soundings from 9 and 10 to 8 and 5 fathoms, and within that, close to the shoar, 6 fathoms.

AM, Sent the Cutter ashore for water; received four Puncheons by the Dutch Boat, also received forty Turtle and other refreshments.

Mostly calm with sultry Weather. Lat. O. 6° 9' S.

Friday,

1785.  
Friday, July 29.

## H. Weather. Winds. Course.

2 . Fair . Calm

4 . . . . . Weighed

5 . . . . . Came to ⌈ in 15 fathoms water abreast  
the 1st Dutch Flag Staff.

10 Came on board the Cutter and Yawl with water

11 Tryed the Current and found it set WSW 2 Miles

7 Hove up the Bower and let go the Kedge ⌈

10 Light Airs WSW. Weighed

12 Came to ⌈  
Mostly Calm

At 11 AM,

H. Weather. Winds. Course. K.L. Soundings

St. Nicholas Point . . . . NNE

Little Cap . . . . NE 2' dist.

Anjere Town . . . . SESE

12 AM at ⌈ Bearings as under,

Great Cap . . . . NNE

Little Cap . . . . NE

Thwart-the-way Isle, N° Point . . . . NNW

Anjere Town . . . . SSE 2' dist.

Finding the Portuguese had a Pilot on board, which  
had been several Voyages through the Strait of Gaspar,  
I determined to follow him through them.

In Company the Portuguese.

Saturday,  
Portuguese by the Dutch Pilot who received from  
and other information.

Mostly calm with light Weather. Lat. O. 6° S.

1785.

H. Weather. Winds. Course. Soundings.

Saturday, July 30.

1, 5 . . . Calm.  
 8 Light Airs NE  
 9, 2 to 3 Calm, end of gale off land shift of P.  
 15 Light Airs SSE. Weighed anchor for noon on land, built  
 boat. 16. At 8 AM. NE to E. 25 to 20 fms.  
 8 or 9 AM. 31 fms. wind abated west by S.  
 9 AM. at noon took 23 $\frac{1}{2}$ , 23 $\frac{1}{2}$  fms. wind W  
 to  $\frac{1}{2}$  past came to  $\leftrightarrow$  in 32 fms.

At 6 AM,

Abreast the Little Cap

At 8,

Great Cap	.	.	.	.	NW $\frac{1}{2}$ W
Little Cap	.	.	.	.	SbW $\frac{1}{2}$ W

At  $\frac{1}{2}$  past 9 AM,

Extream Point of Java	.	.	.	E $\frac{1}{2}$ N
Great Cap	.	.	.	W $\frac{1}{2}$ S

About midway dist. 2 miles.

When  $\leftrightarrow$  at Noon. Lat. O.  $5^{\circ} 53'$  S.

Great Cap	.	.	.	WSW $1\frac{1}{2}$ miles
Extream of Java	.	.	.	E $\frac{1}{2}$ N
Little Cap	.	.	.	SbW
St. Nicholas Point	.	.	.	SEbS
Dift. off Java	4	miles		

In the Afternoon went on shoar, accompanied by Mr. Bartlett and Mr. Daniel, upon the Great Cap, found it entirely covered with Trees and Evergreens. Row'd round the Island, it was steep in all its parts,

D and

1785.  
July 30.

and rocky, except on the NE shoar, where was a small sandy Beach.

The Tide runs so strong to the SW part of this Island, that we could not stem it with good Breeze in a six-oared Cutter, we left the Island at 6 PM, and did not reach the Ship till 2 AM. The Tide to the SW runs rapidly for 14 hours, then takes its Course immediately to the NW, but runs with much less force.

Sunday, July 31.

## H. Weather. Winds. Course. Soundings.

1, 12, 1	Fair . . .	NE	
2, 4	Cloudy . . .	Weighed	
5, 6	. . . . .	ENE	50 to 45 Saw a Ship at $\frac{1}{2}$ off Bantam Pt.
7	. . . . .		33, 35
8	. . . . .	NEbE	Spoke a China Junk bound to Batavia
9	. . . . .		34 to 35 shells
10	. . . . .		35, 34, 34
11	. . . . .		35, 35 Clay
12	. . . . .		35, 33 D <sup>o</sup> and Shells

## At Sunrise,

Bantam Point	. . . . .	SEbE $\frac{1}{2}$ E
Extream to the Westward	. . . . .	SSW $\frac{1}{2}$ W
Great Cap	. . . . .	SW $\frac{1}{2}$ W

At 8 AM, Long.  $\varphi$  Chronometer  $105^{\circ} 51'$  East.

Extreams of Java . . . . . SbE $\frac{1}{2}$ E to SWbS  
 Off shoar about 4 leagues.

Great Cap . . . . . SW $\frac{1}{2}$ W 4 leagues

\* This is the Longitude  $\varphi$  Chronometer corrected; but he afterwards makes it  $105^{\circ} 52'$  E.  $\mathcal{D}$

ATLAS.

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MA 3 A

1785.  
July 31.

At 9 AM, . . . . .  
*Pulo Baby* . . . . . SE $\frac{1}{2}$ S to S $\frac{1}{2}$ E . . . . .  
At Noon Lat. O.  $5^{\circ} 37'$  South. . . . .  
*Pulo Baby* . . . . . SW $\frac{1}{2}$ W . . . . . SE to SE $\frac{1}{2}$  3 or 4 leags.  
*Bantam Point* . . . . . SW $\frac{1}{2}$ W . . . . .  
*St Nicholas Point* . . . . . SW . . . . .  
High Land of *Bantam* . . . . . SW 5 Miles . . . . .

From the following Bearings I again correct the Watch.

*Pulo Baby* . . . . . SE $\frac{1}{2}$ S to S $\frac{1}{2}$ E  
*Great Cap* . . . . . SW $\frac{1}{2}$ W  
Longitude  $\frac{1}{2}^{\circ}$  Chronometer at 8 AM . . . . .  $105^{\circ} 40'$   
Longitude of *Batavia* . . . . .  $106. 51.$   
Difference  $1. 11.$   
True distance by the above Bearings to *Batavia*  $0. 59.$   
To be added to Chronometer  $12$  Miles  
Longitude  $\frac{1}{2}^{\circ}$  Chronometer at 8 AM . . . . .  $105. 40.$   
Error . . . . .  $+ 12.$   
True Longitude, Ship  $105. 52.$

MA 3 A  
Monday,

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So in Original.  $\mathcal{D}$

Original & W22 . . . . .  
W22 . . . . .  
Original & W22 . . . . .  
SW22 . . . . .

MA 3 A

1785.

Monday, August 1.

	H.	Weather.	Winds.	Course.	K.F.	Soundings.	MA	BA
1	2	Cloudy.	NNW.	NE.	3..			
3	.	.	.	.	104	36 to 30		
4	.	.	.	.	104	29, 34		
5	Came to $\rightarrow$ with the Kedge in 30 fathoms							
7	Tried the Current found it set to the Southward $1\frac{1}{2}$ miles $\frac{1}{2}$ hour							
12	Dep.			WSW 1 Miles to $1\frac{1}{2}$				
5	Weighed and made Sail							
6	.	East.	NN $\frac{1}{2}$ E	20..	20	blue Mud		
7	.	.	NNE	107	28 to 24			
8	.	.	N $\frac{1}{2}$ E	108	24, 22	Course to Land 10 Miles		
9	.	.	N $\frac{1}{2}$ E	109	22, 21			
10	10	10	10	10	20, 19, 20			
11	11	11	11	11	19			
12	12	12	12	12	19			
						Dist. 17 Miles		
						10 $\frac{1}{2}$ to 11		

At 4 PM,

Northernmost Point of Pulo Baby SE $\frac{1}{2}$ S5 PM At  $\rightarrow$ , Bearings,Pulo Baby MA 8 to 10 Miles SE $\frac{1}{2}$ E to S $\frac{1}{2}$ EIsland Efem or West Island NE $\frac{1}{2}$ EAt  $\frac{1}{2}$  past 6 AM,

Center of Pulo Baby S 19° E

Efem E 35. N

At 8 AM,

Body of West Island ENE $\frac{1}{2}$ N 2 leagues

Bantam Point SbW

High Land of Bantam SSW 6 $\frac{1}{2}$  leagues

Extr. of Java to the Westward SWbS

At

1785.  
Aug. 1.

At 10 AM,

West Isle . . . . . E $\frac{1}{2}$ N 10 milesAt Noon, Lat. O.  $5^{\circ} 20' S.$ West Isle . . . . . E  $28^{\circ}$  SBrothers . . . . . NNW  $\frac{1}{4}$  W

Light Airs and sultry Weather throughout.

I correct the Chronometer from the following Bearings.

West Island . . . . . ENE  $\frac{1}{2}$  N

Bantam Pt. . . . . SSW

High Land about Bantam . . . . . SSW

Extream to the Westward . . . . . SWbS

Long.  $\frac{1}{2}$  Chron. at 8 AM . . . . .  $105^{\circ} 45'$ Long. of Batavia . . . . .  $106. 51$ Dist. from Batavia  $\frac{1}{2}$  Chron. . . . . 1. 6

True dist. from Batavia . . . . . 54

To be added to the Chron. . . . . 0 12

Therefore Long. of Ship at these Bearings  $105. 45$ 

Error . . . . . • 12

True Long. . . . .  $105. 57$ 

Tuesday,

1785.	H.	Weather.	Winds.	Course.	K. F.	Soundings.	MA. 01 1A
Tuesday, Aug. 2.	1	.	S.	NE	102	Driving 1 P' to the N°	2300
	2	.	.	.	100	Driving 2 P'	2200
	3	.	.	NbE	100	Regular Soundings from 20 to	
	4	Came to	→	with the best Bower in 16½ fms,		17 fms, blue Mud.	
	5	.	.	.	...	Long. $\frac{7}{10}$ Chronom. 106° 8' E	
	5	Rain	.	.	.	.	
	9	Light Airs.	NNE.	Weighed	.	.	indicated
	11	Came to	→	with the best Bower in 17 fms, blue Clay.	.	.	

At 4 PM at →. Bearings,

West Island	.	S 40° E
North Watcher	.	E 24. N
Northernmost of the Brothers	.	N 42. W
Southernmost of the Brothers	.	N 45. W

From the following Observations at 5 PM, at → as above, I correct my Chronometer.

Long. at 5 PM $\frac{7}{10}$ Chron.	105° 56'
Batavia Long.	106. 51
Chronom. dist. from Batavia	0. 55
Dist. true . . . D°	• 43
Error . . . . .	• 12
Long. at 5 PM $\frac{7}{10}$ Chron.	105. 56
	12
Ships true Long.	106. 8

I take a Departure from the Bearings of P° Baby, at 5 PM, allowing the Ships Long. as deduced from the Chronometer to be just.

At 11

1785.  
Aug. 2.At 11 AM, at  $\frac{1}{2}$ , Bearings as under.

<i>West Island</i>	.	.	.	.	.	S 34° E
<i>Northernmost of the Thousand Islands</i>	.	.	.	.	.	S 61° E
<i>North Watcher</i>	.	.	.	.	.	N 26° E
<i>Two Brothers</i>	.	.	.	.	.	W 40° N

No Observation.

Wednesday, Aug. 3.

H. Weather. Winds. Course. K. F. Soundings.

1 Light Airs. NE

AM, 1 Tryed the Current, found it set to the SW 1 mile.

4 L<sup>g</sup>. hard Rain. SE. Weighed.

5 . . . . . NE . . . . .

6 . . . . . . . . . . . 2°4 17 to 13 Mud

7 . . . . . . . . . . . 1°4 }

8 . . . . . . . . . . . 2° }

9 . . . . . . . . . . . 3° }

10 . . . . . . . . . . . 4° } 13 fms. Mud

11 . . . . . . . . . . . 3° }

12 . . . . . . . . . . . 2°4 }

---

20'At 8 AM, Long.  $\frac{1}{2}$  Chron. corrected  $106^{\circ} 1' E.$ The *North Watcher* . . . . . East 4 miles.

At 11,

D° . . . . . SbE $\frac{1}{2}$ E, 10 miles

At Noon,

Body of D° . . . . . S.  $13^{\circ}$  E, 12 miles

Light Airs and Calms with Sultry Weather.

NB. The Longitudes, which follow from 8 AM of this day, are all corrected from the Longitude of *Batavia*; having found, from Bearings of Land, the Chronometer had an error of 12 miles only since leaving England.

Thursday.

## ATLAS.

( 16 )

1785.  
Thursday, August 4.

H.	Weather.	Winds.	Course.	K. F.	Soundings.
1	Cloudy	East	NNE	1..	
2	.	.	.	1..	
3	Hard rain	.	.	3..	
4	.	.	.	1..	
5	Came to $\leftrightarrow$ in 13 fms.				
7	Weighed.				
8	.	NE	3..		
9	Squally rain	.	.	2..	
10	.	NNE	1..	Came to $\leftrightarrow$ in 13 fms.	
2	.	NEE	.	...	
3	Light airs	SE	Weighed	...	
4	.	NE	2..		
5	.	.	3..	13 to 14 Clay	
6	.	.	2..	12, 12 $\frac{1}{2}$ , 12	
7	.	.	3..4	12, 12 $\frac{1}{2}$	
8	.	.	2..4	12, 12 $\frac{1}{4}$	
9	.	NNE	3..	D° D°	
10	.	.	3..	12, 13 blue Clay	
11	.	NNE	3..	12, 13 D°	
12	.	.	3..		

Dist. 37 Miles

The Current constant to SW and WSW, two Knots  
to one Knot.

At 8 AM, Longitude  $106^{\circ} 18'$  E.

Latitude Observed  $4^{\circ} 25'$  South.

At 8 AM,  $106^{\circ} 18'$  } 10 Miles East.

Dep. A. m. at 106. 8. } 10 Miles East.

Friday,

## ATLAS.

( 37 )

1785.	H.	Weather.	Winds.	Course.	K. F.	Soundings.
Friday, Aug. 5.	1	Cloudy	ENE	N $\frac{1}{2}$ E	3° 2'	
	2				3°	12 $\frac{1}{2}$ fathoms Clay
	3			N.	2°	12 $\frac{1}{2}$ , 12 $\frac{1}{2}$ At $\frac{1}{2}$ past 3 PM.
						Long. $\frac{3}{4}^{\circ}$ Chron. 106° 28' E.
	4	Came to $\rightarrow$		in 12 $\frac{1}{2}$ fathoms		
	2	Light airs	SE	. Weighed	...	
	3			NE.	2° 4'	12 $\frac{1}{2}$ , 13 blue Clay
	4				2° 4'	
	5				2° 4'	13, 12
	6				2° 4'	13, 12
	7		ESE	NEbN	2° 6'	13, 11 $\frac{1}{2}$
	8				2° 6'	11 $\frac{1}{2}$ , 11 $\frac{1}{2}$
	9				2° 4'	11 $\frac{1}{2}$ , 10
	10			NNE	2°	12, $\frac{1}{2}$ 10 Lon. $\frac{3}{4}^{\circ}$ Chron. 10 AM
	11					106° 27' E.
	12				3°	12, $\frac{1}{2}$ 10 } 12, $\frac{1}{2}$ 10
					2° 4'	

Dist. 34 Miles

Longitude made from departure to 10 AM . . . . 19.'

Constant Current to the WSW 1k. 4f.

Latitude Observed . . . . . 3° 53' South

Light Winds and Cloudy throughout.

The Ship is at this day Noon, on the Spot where is laid down a Bank to the Southward of *Banka*, and we find our Soundings here very regular, blue mud and Clay. I have spoken to the Pilot S<sup>r</sup>. S<sup>r</sup>. *Barbe* relative to this *Bank*, he says he has passed many times over the spot where Mr. Dalrymple has laid it down, and found no irregularity of Soundings: he also informed me that many Ships of his Nation have been beating here, and know nothing of it.

Saturday,

\* Capt. *Cooper* on 3d Aug. At 8 AM, was, by Chronometer corrected, in Long. 106° 1' E, then the *North Watcher* bore E 4.' which places it in 106° 5' E. Capt. *Cooper* on 5th Aug. At 10 AM, was in Long. by

F

Chronometer

1785. Saturday, Aug. 6.	H.	Weather.	Winds.	Course.	K. F.	Soundings.
	1	Cloudy .	SE. .	NE .	2..	
	2	.	.	NEbE	3..	11, 12, 13
	3	.	.	NEbN	5..	13, 12, 12½ }
	4	.	.	NNE.	2..	10 to 13 } soft blue mud
	5	.	.	NNE.	2..	13, 12 }
	6	.	.	NEbN	3..	12, 11½ }
	7	.	.		3·4	12, 10½ }
	8	Came to $\rightarrow$ in 10 fms.				Current to the WSW 1 <sup>k</sup> 4'
	4	Light Breeze	SE.	Weighed		
	5	.	.	NE .	2..	
	6	.	.		1..	$\frac{1}{2}14$ to $\frac{1}{2}9$
	7	.	.		2..	D°
	8	.	.		2..	10, 9
	9	.	.	NE <sub>2</sub> N	4..	9, 10 soft Ground
	10	.	.	NNE.	4..	10, 9, 8 $\frac{1}{4}$ , 8, 10 Long. $\frac{1}{2}P$ Chron. 106° 43' E
	11	.	.		4..	10, $\frac{1}{2}14$ , blue mud
	12	.	.		4..	12 to 14

Dist. 43 Miles

Long. made from last departure to 10 AM 35.'

From our departure from *Pulo Baby* we had constant Currents to the WSW from 7 PM to 6 AM.

At 6 AM,

Saw the Land from the Mast head bearing . . . NNW  
10 or 11 leagues, it makes like small Islands.

## Soundings

Chronometer corrected, 106° 27.' E. Course to Noon NNE 5<sup>k</sup>. 4'. gives 2'E, or Long. at Noon, 5th Aug. 106° 29.' E, that is 24.' E from *North Watcher*: The Eastern Part of the Bank in question does not, in my Chart, exceed 9.' E from *North Watcher*; so that Capt. Cooper was not on the Spot where *It* is laid down: but, by his own account, 15.' to the Eastward of *It*. The Bank was laid down relatively to *Lufipara*, by Capt. Ekeberg from his own Observations; There is however reason to believe that *Lufipara* lies a few miles farther Eastward, with respect to *The Brothers*, and consequently from *North Watcher*, than the Observations in the *Resolution*, which I followed: but, although the Portuguese alledges, He knows nothing of it, and, at least, doubts its existence; It has been founded on by English Ships, as well as by Capt. Ekeberg.  $\mathcal{D}$

1785.  
Aug. 6.

Soundings very regular with blue mud bottom.

When the Island of *Banka* bore from N  $20^{\circ}$  W to N  $22^{\circ}$  W  
the Long. ♂ Chronometer was at 10 AM  $106^{\circ} 43' E$

At 11<sup>h</sup>. 8<sup>m</sup>. AM, took a View of *Banka*.

<i>Peak</i>	a	N $22^{\circ}$ W
	b	N $20^{\circ}$ W
<i>Low Woody Island</i>	c	E $15^{\circ}$ N

Run to Noon 3<sup>k</sup>. 6<sup>f</sup>. Soundings from 12 to 14 fathoms.

At Noon,\* Stat. 1. Lat. O.  $3^{\circ} 21' S$ . Long.  $106^{\circ} 52' E$ .

Extreams of <i>Banka</i>	N $20^{\circ}$ W to N $45^{\circ}$ W
a	E $5^{\circ} 30' N$
b	N $24. 30. W$
a	N $26. 30. W$
<i>Middle Island</i>	N $7^{\circ} E$

Light winds, pleasant weather, and smooth water throughout.

In Company the Portuguese Ship.

Sunday,

\* In Log At Noon,

The Extreams of <i>Banka</i>	from NNW to NW
A small Island to the Eastward	E $\frac{1}{2} N$ 6' or 7'
Another small Island	N $7^{\circ} 30' E$ 3 or 4 lea <sup>s</sup>

## ATLAS.

( 20 )

2A12A

1785.	H. Weather.	Winds.	Course.	K. F.	Soundings.	Lat.
Sunday, Aug. 7.						
	1	Fair . . .	SE. . .	NNE.	4..	
	2	.	.	NE . . .	5.. 13 to 19	Sand
	3	.	.	.	5.. 20, 24	
	4	.	.	.	6.. 24, 26	
	5	.	.	NNE.	6.. 22, 17, 20,	broken Gravel
	6	.	.	NbE .	6.. 19, 22,	brown Gravel?
	7	.	.	.	5.. 21, 25	
	8	.	.	.	2.. came to ⚡ in 22 fms.	Long.
	10	Light Breeze at SE.	Weighed			Chronometer 106° 55.' E
	11	.	.	NW .	3.6	
	12	.	.	NWbN	7.2 17 to 18½	

Long. made from last departure to 8 AM 47'.

From Noon to 2 PM, run NbE $\frac{1}{2}$ E 8.' Soundings 18.

**At 2 PM, Stat. 2.**

1785.  
Aug. 7. The Land forms a considerable projection, from the South Point of BANKA to the Eastward, Mr. Gaspar makes this Land, an Island; I think to the contrary, as low Land was seen to join to the high Land.

From 2 to 3 PM, run NNE, 8.

At 3 PM, Station 3,

Saddle Island	E 26° N
Button Island	N 37. E 5° T
Sandy Beach Island	N 28. E 15° W
Middle, or Salt Isle	N 9. E to N 11° W

Saddle Island, so called from having that appearance, there is a low Island to the NE of Saddle Island.

There seems a Passage, very large, between Middle, or Salt Island, and BANKA, but take that to windward.

Saddle Island loses that form as it draws to Eastward, and then looks moderately high and well wooded.

The Island BILLITON is to be seen from Saddle Isla.

From St. 3, to St. 4, run NNE 6.

At Stat. 4,

Saddle Island	D	.	.	.	S 75° E to E 5° N
Low, or flat Island,	E	.	.	.	E 10. N
South Island,	F	.	.	.	E 14. N
North Island	G	.	.	.	E 24. N
Distant Island	H	.	.	.	E 26. N
Middle Island	A	.	.	.	N 5. E to N 25° W
BANKA,	I	.	.	.	W 23. N to W 10° S

month

G

At

1785. At  $\frac{1}{2}$  past 4 PM, 17 fathoms gravel. I can't  
 Aug. 7. Sandy Beach Island N.E. out of A. and E.  $20^{\circ}$  N. 100 f. dist.  
 V. Button Island S. of Sandy I. about 1. m. E.  $19^{\circ}$  N. 100 f. dist.  
 R. Ext. of 1st, and L. Ext. of 2d in one saw broad end as  
 An Island . . . . . E  
 A Peak . . . . . E.  $20^{\circ}$  S } qd Saddle Id.  
 Another Peak . . . . . SEBS }

At  $\frac{1}{2}$  past 4, brought *Two Islands*, with *Sandy-Beach*,  
in one; The *Islands* seem to be well wooded, and form the  
*Passage* between them and *Middle Island*.

The Channel is very good, from 19 to 23 fathoms you pass within  $1\frac{1}{2}$  mile of a small sandy-beach Island, on the Starboard hand, with a Cluster of Islands, well wooded; on the other hand, you have Middle, or Salt Island, which is a considerable extent. There seems to be a good Passage between Salt Island and BANKA: It seems to deserve the preference; it being wide, should have pursued this Track, but my Friend, the Portuguese, said it was not good.

**From Station 4 to Station 5, run NNE 7:**

### At Station 5.

<i>Sandy-Beach Island</i>	.	.	.	.	S 32° E
<i>Saddle Island</i>	.	.	.	.	E 39. S
<i>Button</i>	.	.	.	.	E 25. S
<i>Distant Islands</i>	.	.	.	.	E 15. N
<i>Middle Island</i>	.	.	.	.	N 2. W to N 43° W
<i>BANKA</i>	.	.	.	.	N 46. W to W 30. S

From

1785. From Station 5 to Station 6 run NNE 6'.  
Aug. 7.

## At Station 6,

Sandy-Beach Island	S $\frac{1}{4}$ W
Button Island	S 6° E
Flat Island	S 32° E
South Island	E 42° S
North Island	E 33° S
Distant Island	E 5° S
BILLITON	E 5° N to E 12° N

## At 6 set,

Extrems of Middle Island	S 60° W to N 38° W
High Land of Billiton	S 84° E 3 or 4 leag
Gaspar Island	N 9° W

## At 11 AM,

Salt Island	from S 5° W to S 25° W
Banka	S 35° W to N 75° W
Gaspar Island	N 11° W

From Station 6 to Stat. 7 run NbE 8'

## At Station 7,

BILLITON	E 10° S to E 12° N
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From Station 7 to Stat. 8, run NNW 5'

## At Stat. 8,

Gaspar Island	N 4° W
Middle Island	S 10° W to S 30° W
BANKA	S 35° W to N 75° W

## At Noon,

Gaspar Island	N 19° E 4° or 5°
---------------	------------------

'The Portuguese nearly Hull-down astern.

1785. Course. Dist. Latitude Long. Account  
 August 7. S 19° E.\* 5 miles. A. O. 2° 34'.S 2° 33'. indiff. 106° 54'.E

Mostly pleasant breezes with cloudy and rainy weather.

Aug. 8. My departure from *Gaspar Island*, as it bore at Noon.

From Station 8 to Stat. 9, run NNW 7'

At Stat. 9,

<i>Gaspar Island</i>	· · · · ·	N 24° E
<i>A Rock</i>	· · · · ·	N 42. W

From Station 9 to Stat. 10, run NNW 4½'

At Stat. 10,

<i>Gaspar Island</i>	· · · · ·	E 10° N
<i>The Rock</i>	· · · · ·	SSW

From Station 10 to Station 11, run NbW  $\frac{1}{2}$  W 12.'

At Station 11,

<i>Gaspar Island</i>	· · · · ·	S 30° E
<i>BANKA</i>	· · · · ·	S 6° W to S 45° W

*The Rock* to the SWestward of *Gaspar Island* when seen from the Southward, appears like a *Sail*. It has a large *Tree* on the middle, and seems bold to.

*Gaspar Island* is moderately high, seems to be 5' in extent from SE to NW, well wooded, with many water-falls; saw no Breakers, but those on the *Rock* WNW of it.

*Gaspar Island* I place in Longitude from Greenwich by my Chronometer corrected 106° 55'.E Latitude 2° 30'.S.

Monday,

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\* *Gaspar* is said to bear N 19° E at Noon, either this should be S 19° W, or that N 19° W. *D*

1785. H. Weather. Winds. Course. K. F. Soundings.

Monday, Aug. 8.

1	Rain	SW.	NNW	6·4	
2		NbW $\frac{1}{2}$ W	5·0	22 to 22?	Grey Sand with black
3		East	4·0	18, 17	Specks.
4			3·0	17, 17	
5		SW	2·4	17 $\frac{1}{2}$ , 20 D°	
6		NNW	5·0		
7			6·0	18, 19	D°
8			4·4		
9			5·0	20	blue Mud
10		NbW $\frac{1}{2}$ W	4·4	18	
11			5·0	19	
12			5·0	19	
1			5·2	20	
2		SE	5·4	20, 19	
3			5·6	20, 20	Grey Sand
4			6·0	20, 19	
5			6·0	17, 18	
6			7·0	18, 19	
7			6·0	18	Lon. $\frac{7}{10}$ Chron. 106° 17'
8			6·0	18	Lon. made from Gaspard Isle 38'
9			6·0	19	
10			5·4	19	White Sand
11			5·0	21	
12			5·0	21	

Dist. 125 Miles.

Course.	Dist.	D.Lat.	Dep.	Latitude.	Lon. $\frac{7}{10}$ Account
				A O	from Gaspard Isle.
				S.	
N 18° W	124.'	118.'	38.'	0° 35.'	0° 33.'
					106° 16.'

At 3 PM,

The Extreams of Banka . . . . . from W 34° S to W 54° S  
 Rock off Banka . . . . . S 11. E 4 or 5 leags.  
 Body of Gaspard Island . . . . . S 45. E 3 leagues

At 5 PM,

Gaspard Island . . . . . S 29. E 6 or 7 leags.  
 Extreamis of Banka . . . . . S 6. W to S 45° W

At Sunset, the Portuguese, Courses down a-stern.

Light Winds and Cloudy throughout.

I take a departure from Gaspard Island.

H

Tuesday,

1785.	H.	Weather.	Winds.	Coure.	K. F.	Soundings.	
Tuesday, Aug. 9.	1, 2	Rain .	S° . .	NbW.	11..	19	
	3	.	.	.	5..	20	
	4	.	.	.	5..	21	Long. $\frac{1}{2}^{\circ}$ Chron. 106° 8.'
	5	.	.	.	5..	24	
	6	.	.	.	5..	26	Blue Clay.
	7	.	.	NNW.	4..	24	
	8	.	.	.	4..	24	
	9	.	.	.	5..		
	10	.	.	.	5..	24	
	11	.	.	.	5..	25	Blue Clay
	12	.	.	.	5..	25	
	1	.	.	.	5..	25	
	2, 3	.	.	.	10..	27	
	4	.	.	.	5..	28	
	5	.	.	.	4..	30	
	6	.	.	.	4..	30	
	7	.	.	.	3..	29	
	8	.	.	.	4..	30	Blue Clay and Shells
	9	.	.	.	5..	29	
	10	.	.	.	4..	30	
	11	.	.	.	5..	30	
	12	.	.	.	5..	32	
							119.'

Course.	Dist.	D.L.	Dep.	Latitude.	D.Long.	Long. A
A.	O.					
N 20° W	117.'	110.'	40.'	1° 17.' N	1° 25.' N	40.' W
						105° 36.' E

Light Breezes, pleasant Weather, and smooth Water throughout.

Long. by Account to 8 AM

Long. made from *Gasper Island* at 8 AM . . 1° 26.' W

Long. at 8 AM  $\frac{1}{2}^{\circ}$  Chron. . . . . 105. 29. E

This, and the preceding day, saw great quantities of reddish coloured spawn, floating on the Water, in a North and South direction.

Wednesday,

1785.	H.	Weather	Winds	Course.	K. F.	Soundings.	MA 8 18.
Wednesday, Aug. 10.	1	Fair	.	SbE	NNW	5.2	
	2	.	.	SbW	.	5.0 } 28	White sand and black specks
	3	.	.	SbW	.	5.2 }	
	4	.	.	.	6.0	26	21 to 26 fms
	5	.	.	.	5.0 }	27	
	6	.	.	.	5.2 }	27	MA 11 18.
	7	.	.	NbW.	4.0	28	
	8	.	.	N.	3.4 }	27	
	9	.	.	N.	4.0 }	27	A 18 Moon
	10	.	.	NbW.	3.4		
	11	.	.	.	3.4	30	
	12	.	.	.	4.0	31	
	1	.	.	.	3.0	30	
	2	.	.	.	4.0	30	
	3	.	.	.	4.0		
	4	.	.	.	4.0	31	
	5	.	.	.	5.0		
	6	.	.	NbE.	4.6	No Ground 32	
	7	.	.	.	5.0	Long. 28° Chron. 105° 0' E	
	8	.	.	.	5.6		
	9	.	.	.	6.2		
	10	.	.	.	6.4	½ past Long. 28° Chron. 105° 12'	
	11	.	.	.	6.0	noon	
	12	.	.	.	6.4		

Dist. 115 Miles

Course.	Dist.	D.Lat.	Dep.	Latitude	D.Long.	Long. A
A. O.						
N 4° W	113.'	113.'	8.'	3° 18' N 3° 28' N	8.W	105° 28' E

A pleasant Monsoon and fair weather throughout

At 5 AM,

Saw a small Island bearing . . . S 47° E 6 leagues

At

1785. At 8 AM, Aug. 10.

Northernmost of the Anambas. WNW East  
Largest of D° S 19° E  
Southernmost of D° S 61° E

At 11 AM,

The Northernmost Point of the Anambas. S 55° E 7 leagues

At Noon,

Extreams of the Anambas S 45° E to S 33° E  
Off shoar about 8 leagues

Longitude made from Gaspar Isle, at 8 AM. 1° 55' W

Thursday, 11.

H. Weather. Winds. Course. K. F.

1 . Fair .	SbW	NNE	6..				
2, 12 } . . . . .		NNE $\frac{1}{2}$ E 125° 4 }		At $\frac{1}{2}$ past,			
1, 8 } . . . . .				Long. $\frac{1}{2}$ Chron. 106° 2' E			
9 . . . . .				Long. made from Gaspar 0. 53° W			
10, 12 . . . . .			22° 4				
				163° 4			

A pleasant Monsoon with fair Weather and smooth Water.

Course.	Dist.	D.Lat.	Dep.	Latitude N.	D.Lon.	Longitude E.
				A	O	A
N 31° E	160'	137'	82' 5° 45'	5° 31'	82° E	106° 50' 106° 16'
				14' S		

Friday, 12.

H. Weather. Winds. Course. K. F.

1, 4 Cloudy . . . . .	SbW	NNE $\frac{1}{2}$ E 28° 2				
5 . . . . .	SSW . . . . .	6° 4	At $\frac{1}{2}$ past Lon. $\frac{1}{2}$ Chron. 106° 33' E			
6 . . . . .		6° 6				
7, 12, 8 . . . . .		97° 6	At 8 Lon. $\frac{1}{2}$ Chron. 107° 18 E			
9, 10 . . . . .		14° 2	D° made fr. Gaspar 0. 23 E			
11, 12 H <sup>d</sup> rain . . . . .		13° 4				
			166° 6			

A steady Monsoon with Cloudy Weather.

Course.	Dist.	D.Lat.	Dep.	Latitude N.	D.Lon.	Longitude E.
				A	O	A
NNE $\frac{1}{2}$ E	167'	146'	78' 7° 56'	7° 49'	79° E	108° 9' 107° 32'
				7' S		

Saturday,

## ATLAS.

( 29 )

SAPATA

1785.	H. Weather.	Winds.	Course.	K.F.	I
Saturday, Aug. 13.	1, 4	Cloudy.	SWbS	NNE $\frac{1}{2}$ E 31°	Longitude from Sapata 108° 4'
	5	.	NbE $\frac{1}{2}$ E	8.5	Chron. 108° 4'
	6	.	NbE $\frac{1}{2}$ E	9..	Current Dif. Dif. Dif.
	7, 10	.	NbE	34..	2811
	11	.	NEbN	8..	Avg. 2811
	12	.	NE.	8..	Passage
	1	.	NE $\frac{1}{2}$ E	7.4	2811
	2	L <sup>s</sup> . to SW	.	7..	II. Weather. Wind. Current
	3, 5	.	NE	19.4	Wind. Current
	6	.	NE	7..	Wind. Current
	7	.	NE $\frac{1}{2}$ E	6..	Wind. Current
	8, 9	.	NE $\frac{1}{2}$ E	13.3	Wind. Current
	10	.	P <sup>o</sup> Sapata	NNW 5 leagues	Wind. Current
	11	.		8..	Wind. Current
	12	.		8.4	Wind. Current
				<u>183.'</u>	

At 6 PM, Hauled up NbE to pass *Middleburgh Shoal*.

Intend to steer NE after running 45', finding the Current set me 12' to the Eastward since 8 AM Yesterday.

At 8 AM,

P<sup>o</sup> *Sapata* bearing NWbN 3 or 4 leagues

At Noon,

*Sapata* bore WbN dist. about 7 leags.

From 9 to 10 AM, took separate Bearings of *Sapata* and found its Meridian distance to be 11' West of the Ships.

I	Longitude
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1785.  
August 13.Longitude from *Sapata* at Noon 20' East.

Course.	Dist.	D.Lat.	Dep.	Latitude	D.Lon.	Lon. A.
A				O fr. <i>Sapata</i> .		
SbE	21'	20'	4'	9° 44' N	10° 3' N.	4° 109° 4' East.

Sunday, 14.

H. Weather. Winds. Course. K.F.

$\frac{1}{3}$ , 22 Fair . . SW . . NE . . 24.4 At 2<sup>h</sup> 40<sup>m</sup> Lon. 7° Chron. 109° 39' E

fr. 10 AM 13<sup>th</sup> Easting } 30to 2<sup>h</sup> 40<sup>m</sup> PM, 14<sup>th</sup> }At 10 AM 13<sup>th</sup> . . 109° 9*Sapata* . . 11 WLong. of *Sapata* 7° Chronometer 108. 58

There is a mistake here, as the Bearings of *Sapata*, WbN about 7 leagues, gives EbS, instead of SbE, the D.Lat. will therefore be 4.' and Dep. 20.' and D.Long. from *Sapata* 20' as above. The Long. A of course erroneous. *A*